## Application Serial No. 09/855,220 Filed: May 14, 2001

## Amendment in the Claims

1. (currently amended) A method of classifying an instance comprising the steps of:
receiving an instance to be classified, the instance to be classified comprising at least
one attribute and corresponding relevance value;

recursively determining a best host for the instance to be classified; and inserting the instance to be classified into a location relative to at least one child of the best host within a classification structure, the classification structure comprising at least one node, and the node comprising at least one attribute and corresponding relevance value; and displaying the classification structure;

determining at least one distinguishing feature of the instance to be classified; and visually contrasting the instance to be classified vice nodes within the classification structure, based upon the value of the at least one distinguishing feature.

2. (original) The method of claim 1, wherein determining the best host for the instance to be classified comprises:

processing class concept nodes of the classification structure, comprising the steps of: receiving a class concept node of the classification structure;

calculating a delta cohesiveness measurement ( $\Delta$ CM) value between the instance to be classified and the class concept node; and

storing the largest  $\Delta$ CM value and the corresponding class concept node at each level of the classification structure;

determining the largest  $\Delta$ CM value over all levels of the classification structure; and storing the class concept node corresponding to the largest  $\Delta$ CM value over all levels of the classification structure.

3. (cancelled)

Page 3 of 6

4. (currently amended) The method of claim [1]25, wherein inserting the instance to be classified into a location relative to at least one child of the best host within a classification structure comprises:

selecting at least one best host child node;

calculating a  $\Delta$ CM value between the instance to be classified and the at least one best host child;

storing the  $\Delta$ CM value associated with each at least one best host child; storing a count of the total number of the at least one best host child;

storing a count of the total number of stored  $\Delta CM$  values associated with each at least one best host child that are greater than 0.0; and

adding the instance to be classified to the classification structure as a sibling or child of the at least one best host child, based upon the  $\Delta$ CM value associated with each at least one best host child, the count of the total number of the at least one best host child, and the count of the total number of stored  $\Delta$ CM values associated with each at least one best host child that are greater than 0.0.

- 5. (cancelled) The method of claim 1, further comprising the step of:

   displaying the classification structure;
   determining at least one distinguishing feature of the instance to be classified; and
   visually contrasting the instance to be classified vice nodes within the classification

   structure, based upon the value of the at least one distinguishing feature.
- 6. (currently amended) The method of claim [5]1, wherein the at least one distinguishing feature comprises at least one of an attribute value, a context value and a relationship value.
- 7. (cancelled).

Claims 8-24 (canceled).

Application Serial No. 09/855,220

Filed: May 14, 2001

Express Mail Cert No. EV 740 586 353 US Attorney Docket No. 46872/253156 Page 4 of 6

25. (new) The method of claim 2, wherein determining the best host for the instance to be classified is performed recursively.